

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Optim Energy Altura Cogen, LLC

AUTHORIZING THE OPERATION OF
Altura Channelview Cogeneration Facility
Optim Energy Altura Cogen
Electric and Other Services Combined

LOCATED AT
Harris County, Texas
Latitude 29° 48' 52" Longitude 95° 6' 37"
Regulated Entity Number: RN100210863

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: O1239 Issuance Date:

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
 - E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
 - F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.302 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
 - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
 - G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
 - (i) Title 30 TAC § 101.352 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
 - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
 - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
 - (v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)
 - (vi) Title 30 TAC § 101.359 (relating to Reporting)
 - (vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
 - (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)

- C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar

quarter unless the emission unit is not operating for the entire quarter.

- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the

source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
 - (ii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)

- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

- 8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
12. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
 - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
14. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
 - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)
 - (ii) For electric generating facilities in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020(2)(B)
 - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).

- C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
15. Use of Emission Credits to comply with applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
16. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
- (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

17. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
 - B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Permit Location

18. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

19. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

20. For units ENG 101, ENG 201, ENG 301, ENG 401, ENG 501, and ENG 601 (identified in the Certificate of Representation as units ENG101, ENG201, ENG301, ENG401, ENG501 and ENG601), located at the affected source identified by ORIS/Facility code 50815, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.

A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

E. Excess emissions requirements for SO₂ and NO_x.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

(ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:

(1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.

(2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

(i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.

(1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

(2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.

(3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.

(4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.

(ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

(i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).

(ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.

- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
 - (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
 - (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
 - (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
 - (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
 - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Clean Air Interstate Rule Permit Requirements

21. For units ENG 101, ENG 201, ENG 301, ENG 401, ENG 501, and ENG 601 (identified in the Certificate of Representation as units ENG101, ENG201, ENG301, ENG401, ENG501 and ENG601), located at the affected source identified by ORIS/Facility code 50815, the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

A. General Requirements

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO_x source with the CAIR NO_x emissions limitation.

- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO₂ source with the CAIR SO₂ emissions limitation.

C. NO_x emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO_x unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (iv) CAIR NO_x allowances shall be held in, deducted from or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO_x allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in this CAIR permit.

D. NO_x excess emissions requirement

- (i) If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, the owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO₂ emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, CAIR SO₂ allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO₂ unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (iv) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO₂ allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in this CAIR permit.

F. SO₂ excess emissions requirements

- (i) If a CAIR SO₂ source emits sulfur dioxides during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source and the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
 - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO_x designated representative for the source and each CAIR NO_x unit and the CAIR SO₂ designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or relied upon for compliance determinations.
 - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program.
- (ii) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source and a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.

H. The CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.

- I. The CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x source or CAIR SO₂ source or the CAIR designated representative of a CAIR NO_x source or CAIR SO₂ source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x unit or CAIR SO₂ unit or the CAIR designated representative of a CAIR NO_x unit or CAIR SO₂ unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit or a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary	21
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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
ENG-001	SRIC ENGINES	N/A	R7303-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
ENG-001	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG-601	STATIONARY TURBINES	N/A	R7310-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
ENG-601	STATIONARY TURBINES	N/A	60GG-1	40 CFR Part 60, Subpart GG	No changing attributes.
GRP STACK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	STK-101, STK-201, STK-301, STK-401, STK-501, STK-601	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPDCTBURN	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	ENG-101-B, ENG- 201-B	R7310-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRPDCTBURN	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	ENG-101-B, ENG- 201-B	60Db-1	40 CFR Part 60, Subpart Db	No changing attributes.
GRPOLDTURB1	STATIONARY TURBINES	ENG-101, ENG-201	R7310-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRPOLDTURB1	STATIONARY TURBINES	ENG-101, ENG-201	60GG-1	40 CFR Part 60, Subpart GG	No changing attributes.
GRPOLDTURB2	STATIONARY TURBINES	ENG-301, ENG-401, ENG-501	R7310-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRPOLDTURB2	STATIONARY TURBINES	ENG-301, ENG-401, ENG-501	60GG-1	40 CFR Part 60, Subpart GG	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ENG-001	EU	R7303-1	EXEMPT	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
ENG-001	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ENG-601	EU	R7310-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b) [G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a)(2)(A) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.320(f) § 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ENG-601	EU	R7310-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(A) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
ENG-601	EU	60GG-1	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(4)	None	None
ENG-601	EU	60GG-1	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1)	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP STACK	EP	R1111-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPDCTBURN	EU	R7310-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3) § 117.8120	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPDCTBURN	EU	R7310-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b) [G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.320(f) § 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPDCTBURN	EU	60Db-1	SO ₂	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPDCTBURN	EU	60Db-1	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPDCTBURN	EU	60Db-1	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPDCTBURN	EU	60Db-1	NO _x	40 CFR Part 60, Subpart Db	§ 60.44b(a)(4)(i) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Except as in §60.44b(k), (l), on/after §60.8 test, no facility combusting natural gas and distillate oil (duct burner in a combined cycle system) shall discharge NO _x in excess of 86 ng/J heat input.	§ 60.46b(c) § 60.46b(f) § 60.46b(f)(2) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(i) § 60.49b(v) § 60.49b(w)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPOLDTURB1	EU	R7310-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b) [G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a)(2)(A) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.320(f) § 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPOLDTURB1	EU	R7310-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(A) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
GRPOLDTURB1	EU	60GG-1	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(4)	None	None
GRPOLDTURB1	EU	60GG-1	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3)	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPOLDTU RB2	EU	R7310-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b) [G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a)(2)(A) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	§ 117.320(f) § 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPOLDTU RB2	EU	R7310-1	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(A) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B)	§ 117.345(a) § 117.345(f) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
GRPOLDTU RB2	EU	60GG-1	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(4)	None	None
GRPOLDTU RB2	EU	60GG-1	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(c)(1)	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

Additional Monitoring Requirements

Periodic Monitoring Summary 34

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP STACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: fuel type	
Minimum Frequency: Annually, or when alternate fuel is used	
Averaging Period: N/A	
Deviation Limit: Use of alternate fuel, or 15% opacity over a six-minute period	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas (natural gas), for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Permit Shield

Permit Shield 36

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
ENG-001	N/A	40 CFR Part 60, Subpart IIII	Engine was constructed, reconstructed, modified prior to July 11, 2005.
ENG-601	N/A	40 CFR Part 60, Subpart KKKK	Turbines have a peak heat input load equal to or greater than 10MMBtu/hr and commenced construction, modification, or reconstruction prior to February 18, 2005.
GRPOLDTURB1	ENG-101, ENG-201	40 CFR Part 60, Subpart KKKK	Turbines have a peak heat input load equal to or greater than 10MMBtu/hr and commenced construction, modification, or reconstruction prior to February 18, 2005.
GRPOLDTURB2	ENG-301, ENG-401, ENG-501	40 CFR Part 60, Subpart KKKK	Turbines have a peak heat input load equal to or greater than 10MMBtu/hr and commenced construction, modification, or reconstruction prior to February 18, 2005.

New Source Review Authorization References

New Source Review Authorization References.....	38
New Source Review Authorization References by Emission Unit	39

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX493M4	Issuance Date: 05/10/2013
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 76375	Issuance Date: 05/13/2015
Authorization No.: 79738	Issuance Date: 03/11/2016
Authorization No.: 9241A	Issuance Date: 05/10/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.371	Version No./Date: 09/04/2000
Number: 5	Version No./Date: 09/12/1989

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
ENG-001	EMERGENCY DIESEL GENERATOR	5/09/12/1989
ENG-101	90 MW GE STATIONARY GAS TURBINE W/ DUCT BURNER	9241A, PSDTX493M4
ENG-101-B	DUCT BURNER ON GAS TURBINE ENG-101	9241A, PSDTX493M4
ENG-201	90 MW GE STATIONARY GAS TURBINE W/ DUCT BURNER	9241A, PSDTX493M4
ENG-201-B	DUCT BURNER ON GAS TURBINE ENG-201	9241A, PSDTX493M4
ENG-301	90 MW GE STATIONARY GAS TURBINE	9241A, PSDTX493M4
ENG-401	90 MW GE STATIONARY GAS TURBINE	9241A, PSDTX493M4
ENG-501	90 MW GE STATIONARY GAS TURBINE	9241A, PSDTX493M4
ENG-601	80 MW GE PG7111EA STATIONARY GAS TURBINE	9241A, PSDTX493M4
STK-101	90 MW GE GAS TURBINE W/ DUCT BURNER - STACK	9241A, PSDTX493M4
STK-201	90 MW GE GAS TURBINE W/ DUCT BURNER - STACK	9241A, PSDTX493M4
STK-301	90 MW GE GAS TURBINE - STACK	9241A, PSDTX493M4
STK-401	90 MW GE GAS TURBINE - STACK	9241A, PSDTX493M4
STK-501	90 MW GE GAS TURBINE - STACK	9241A, PSDTX493M4
STK-601	80 MW GE PG7111EA GAS TURBINE - STACK	9241A, PSDTX493M4

Appendix A

Acronym List	41
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Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
ELP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
MRRT	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table	43
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Major NSR Summary Table

Permit Number: 9241A/PSDTX493M4				Issuance Date: May 10, 2013			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
STK-101	GE Turbine and 140 MMBtu/hr Duct Burner Stack (MSS)(5)	NO _x	159.3	--	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		CO	180	--	5,7	5,7,10,12,17,19,20,21	7
STK-201	GE Turbine and 140 MMBtu/hr Duct Burner Stack (MSS)(5)	NO _x	159.3	--	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		CO	180	--	5,7	5,7,10,12,17,19,20,21	7
STK-301	GE Turbine Stack (MSS) (5)	NO _x	159.3	--	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		CO	180	--	5,7	5,7,10,12,17,19,20,21	7
STK-401	GE Turbine Stack (MSS) (5)	NO _x	159.3	--	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		CO	180	--	5,7	5,7,10,12,17,19,20,21	7
STK-501	GE Turbine Stack (MSS) (5)	NO _x	159.3	--	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		CO	180	--	5,7	5,7,10,12,17,19,20,21	7
STK-601	GE F7EA Turbine Stack	NO _x	58	227.8	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		NO _x (5)	116	--	2,5,6,7,8	2,5,6,7,8,10,12,17,19,20,21	2,7,8,13
		CO	59	227.8	5,7	5,7,10,12,17,19,20,21	7
		CO (5)	180	--	5,7	5,7,10,12,17,19,20,21	7
		PM	7.0	30.7	5,6,7	5,6,7,10,12,17,19,20,21	7

Permit Number: 9241A/PSDTX493M4					Issuance Date: May 10, 2013		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		VOC	6.1	18.7	5,7	5,7,10,12,17,19,20,21	7
		SO ₂	1.7	6.5	2,5,6,7,9	2,5,6,7,9,10,12,17,19,20,21	2,7,9
STK-801	Auxiliary Steam Boiler	NO _x	17.6	50	2,4,5,6,7,8	2,4,6,7,8,10,12,18,19,20,21	2,4,7,8,13,14
		NO _x (MMS)(5)	35.2	--	2,5,6,7,8	2,6,7,8,10,12,18,19,20,21	2,7,8,13
		CO	25.7	73	2,5,7	2,7,10,12,18,19,20,21	2,7
		PM	1.76	1.8	2,5,6,7	2,7,10,12,18,19,20,21	2,7
		VOC	1.41	4.0	2,5,7	2,7,10,12,18,19,20,21	2,7
		SO ₂	0.63	5.0	2,5,6,7,9	2,6,7,9,10,12,18,19,20,21	2,7,9
MSS-FUG	Maintenance, Startup, and Shutdown - Site-wide	VOC	1.62	<0.01	20,21	20,21	--
		NO _x	<0.01	<0.01	20,21	20,21	--
		PM	<0.01	<0.01	20,21	20,21	--
		PM ₁₀	<0.01	<0.01	20,21	20,21	--
		PM _{2.5}	<0.01	<0.01	20,21	20,21	--
Standard Permit (SP) sources incorporated by reference. Sources remain authorized by the SP(s) as listed below:							
Standard Permit Number 79738							
STK-101	GE Turbine and 140 MMBtu/hr Duct Burner Stack	NO _x	24.63	107.9			
		CO	120.9	529.7			

Permit Number: 9241A/PSDTX493M4					Issuance Date: May 10, 2013		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM ₁₀	14.7	64.5			
		VOC	2.2	7.9			
		SO ₂	2.0	8.7			
STK-201	GE Turbine and 140 MMBtu/hr Duct Burner Stack	NO _x	24.63	107.9			
		CO	120.9	529.7			
		PM ₁₀	14.7	64.5			
		VOC	2.2	7.9			
		SO ₂	2.0	8.7			
Standard Permit Number 76375							
STK-301	GE Turbine Stack	NO _x	159.3	77.2			
		CO	115	504			
		PM ₁₀	14	61.3			
		VOC	2.0	7.0			
		SO ₂	1.8	7.7			
STK-401	GE Turbine Stack	NO _x	159.3	77.2			
		CO	115	504			
		PM ₁₀	14	61.3			
		VOC	2.0	7.0			
		SO ₂	1.8	7.7			
STK-501	GE Turbine Stack	NO _x	159.3	77.2			

Permit Number: 9241A/PSDTX493M4				Issuance Date: May 10, 2013			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		CO	115	504			
		PM ₁₀	14	61.3			
		VOC	2.0	7.0			
		SO ₂	1.8	7.7			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) NO_x - total oxides of nitrogen
CO - carbon monoxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
PM_{2.5} - total particulate matter equal to or less than 2.5 microns in diameter
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
SO₂ - sulfur dioxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual limits include normal and maintenance, start-up, and shutdown (MSS) emissions.
- (5) Emission limits applicable during MSS activities. Hourly emissions shown are the only emissions that are higher than emissions during normal operations. During CT MSS, normal operations emissions limits apply to all pollutants not shown with separate MSS limits.

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 10, 2013

MR NICK RAHN
CHIEF EXECUTIVE OFFICER OPTIM ENERGY
OPTIM ENERGY ALTURA COGEN LLC
8403 COLESVILLE RD STE 915
SILVER SPRING MD 20910-3473

Re: Permit Alteration
Permit Number: 9241A
Cogeneration Facility
Channelview, Harris County
Regulated Entity Number: RN100210863
Customer Reference Number: CN603228941
Account Number: HG-1174-V
Associated Permit Number: PSDTX493M4

RECEIVED

AUG 28 2015

TCEQ
CENTRAL FILE ROOM

Dear Mr. Rahn:

This is in response to Mr. Kerry Higgins' email of April 23, 2013, requesting alteration of the maximum allowable emission rates table (MAERT) of the above-referenced permit. We understand that in the MAERT of the renewed permit dated April 8, 2013, the "Source Name" for the Unit 6 combustion turbine was not revised to "GE F7EA" in accordance with Mr. Higgins' March 5, 2013 email request. In addition, it was noted that the Unit 1 and 2 duct burner heat input rating was not revised on the second page of the MAERT consistent with the first page.

As indicated in Title 30 Texas Administrative Code § 116.116(c) [30 TAC § 116.116(c)], and based on our review, Permit Number 9241A is altered. Enclosed is the altered MAERT and a new permit face to replace those currently attached to your permit. Please attach these to your permit.

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Mr. Randy Hamilton, P.E. at (512) 239-1512 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Mr. Nick Rahn

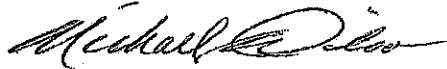
Page 2

May 10, 2013

Re: Permit Number: 9241A

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Sincerely,



Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

MPW/rh

Enclosure

cc: Mr. Kerry Higgins, Manager, Technical Services, The WCM Group Inc, Humble
Director, Harris County, Pollution Control Services, Pasadena
Air Section Manager, Region 12 - Houston
Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental
Protection Agency, Region 6, Dallas

Project Number: 192205



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT



A Permit Is Hereby Issued To
Optim Energy Altura Cogen, LLC
Authorizing the Continued Operation of
Electrical Cogeneration Facility
Located at **Channelview, Harris County, Texas**
Latitude 29° 48' 52" Longitude 95° 06' 37"

Permit: 9241A

Alteration Date : May 10, 2013

Renewal Date: April 8, 2023


For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Special Conditions

Permit Numbers 9241A and PSDTX493M4

Emission Limitations, Fuel Specifications, and Work Practices

1. This permit authorizes only those sources of emissions listed in the attached tables entitled “Emission Sources – Maximum Allowable Emission Rates” (MAERT), “Attachment A”, and “Attachment B” and those sources are limited to the emission limits and other conditions specified on the attached MAERT. This permit authorizes planned maintenance, startup, and shutdown (MSS) activities which comply with the emission limits in the MAERT.
2. The sources identified in this condition are subject to and shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Standards of Performance for New Stationary Sources (NSPS) as follows:

Source	Emission Point Number (EPN)	Subpart	Standards of Performance for:
Combustion Turbines (CTs)	STK-101, STK-201 STK-301, STK-401 STK-501, STK-601	GG	Stationary Gas Turbines
Duct Burners	STK-101, STK-201	D	Fossil-Fuel-Fired Steam Generators
Auxiliary Boiler	STK-801	Db	Industrial-Commercial-Institutional Steam Generating Units
All of the above		A	General Conditions

3. Except during planned MSS activities as described in Special Condition Nos. 15 and 17, the concentration of emissions from each CT shall not exceed the following limits, expressed as one-hour block average concentrations in parts per million by volume, dry basis (ppmvd) at 15 percent oxygen (15% O₂):

Pollutant	CT EPNs	Concentration
Nitrogen oxides (NO _x)	STK-101, STK-201, STK-301, STK-401, and STK-501	42
	STK-601	15
Carbon monoxide (CO)	STK-601	25

4. The Auxiliary Boiler is subject to the following limitations.
 - A. Except during planned MSS activities as described in Special Condition Nos. 15 and 18, the NO_x concentration shall not exceed 41 ppmvd at 3% O₂, or

equivalently, 0.05 pound NO_x per million Btu (MMBtu) of heat input, one-hour block average.

- B. Operation shall only be allowed when at least one of the CTs authorized by this permit has been shut down. Any of the six CTs may be shut down to satisfy this requirement. Except as provided in B.(1) and (2) of this Special Condition, the CT that is shut down to satisfy this requirement shall not resume operation until the Auxiliary Boiler has shut down.
 - (1) A transitional period not to exceed three hours shall be allowed when every CT and the Auxiliary Boiler may be operating at the same time. During transitional periods, one unit will be started up while the other is being shut down.
 - (2) During the annual relative accuracy test audits (RATA) required by 40 CFR Part 60, Appendix F, all units may remain operational for the duration of the testing.
 - C. Fuel usage is limited to 352.2 MMBtu per hour and 2,000,000 MMBtu per year.
5. Fuel usage of the permitted facilities is subject to the following.
- A. Authorized fuels are:
 - (1) pipeline-quality, sweet natural gas containing no more than 0.624 grains total sulfur per 100 dry standard cubic feet (dscf); and
 - (2) ethane or propane fuel, to a maximum of 30 percent by weight with natural gas, containing no more than 0.624 grain total sulfur per 100 dscf.
 - B. The use of any other fuel will require a modification to this permit or authorization via either permits-by-rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106 or by standard permit under 30 TAC Chapter 116, Subchapter F.
 - C. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in this facility or shall allow an air pollution control agency representative to obtain a sample for analysis.

6. Except during MSS activities, the opacity shall not exceed five percent averaged over a six-minute period from each combustion unit stack. During MSS activities, the opacity shall not exceed 15 percent. Each determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent, or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

Initial Compliance Determination

7. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the CT and Auxiliary Boiler stacks.
 - A. Initial compliance determination tests/performance tests conducted pursuant to 40 CFR Part 60.8 were completed as follows.
 - (1) Testing of STK-101 through STK-501 with the CTs fueled by natural gas was completed between February 11, 1986 and March 4, 1986. The CTs were tested for NO_x, CO, and O₂ at full load conditions with CT-only firing. Additionally, with CTs and duct burners firing, STK-101 and STK-201 were tested for NO_x, CO, and O₂ and STK-101 was tested for particulate matter (PM).
 - (2) Testing of STK-101 through STK-301 with the CTs fueled by an alternate fuel mixture of ethane/propane and natural gas was completed between October 19, 1992 and November 4, 1992. Additionally, STK-101 and STK-201 were tested for NO_x, CO, O₂, and PM with the CTs firing alternate fuel at full load, with the duct burners firing natural gas only.
 - (3) Testing of STK-601 with the CT fueled by natural gas was completed on July 13, 1995. The CT was tested at full load conditions for NO_x, CO, PM, and opacity.

- B. Stack sampling and other testing may be required at any time by the Executive Director of the TCEQ to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing at his own expense. Should additional sampling be required, it must be conducted in accordance with appropriate procedures of the TCEQ "Sampling Procedures Manual." Results of the most recent stack tests may be used to determine compliance with the permit emission limits.

Continuous Determination of Compliance

- 8. The holder of this permit shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for the CTs and Auxiliary Boiler authorized by this permit to measure and record the concentrations of NO_x and O₂ from each exhaust stack. The CEMS shall meet the following requirements.
 - A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 60, Appendix B. Written copies of the results shall be submitted within 60 days of completion of the tests to the TCEQ Houston Regional Office and the TCEQ Office of Air, Air Permits Division in Austin. A written copy of the test results for the turbines only shall also be sent to the Air Enforcement Branch of the EPA in Dallas.
 - B. The zero and span of the system shall be checked daily and corrective action must be taken whenever the 24-hour span drift exceeds two times the amounts specified in 40 CFR Part 60, Appendix B. Each gaseous monitor shall be quality-assured at least quarterly using cylinder gas audits (CGA). The CGA method to be used is contained in 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2. An equivalent method approved by the EPA and the TCEQ may be used.
 - C. The gaseous monitoring data shall be reduced to hourly average concentrations at least once every day using a minimum of four equally-spaced data points from each one-hour period. At least two valid data points shall be generated during the hourly period in which the zero and span are performed.

- D. The CEMS shall demonstrate 90 percent monitor data availability on a monthly basis. The percent monitor data availability shall be calculated as the total unit operating hours for which quality-assured data was recorded divided by the total unit operating hours.
 - E. All CGA exceedances greater than ± 15 percent accuracy and any unscheduled CEMS downtime shall be reported to the TCEQ Houston Regional Office and the Air Enforcement Branch of the EPA in Dallas (for the turbines only), and necessary corrective action shall be taken. Unscheduled CEMS downtime does not include daily zero and span checks, quarterly CGAs, nor annual RATA. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Regional Director or the EPA.
 - F. The CEMS shall demonstrate an annual system reliability of at least 90 percent (downtime does not include daily zero and span measurement time or CT or Auxiliary Boiler downtime) or options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Houston Regional Director.
 - G. The valid hourly data from the CEMS shall be used to determine compliance with the concentration limits of Special Condition No. 3 and 4.A. and in conjunction with the hourly average fuel consumption data required by Special Condition No. 12.C., the hourly emission rate limits of the MAERT. For each operating hour, pounds per hour data from each stack must be cumulatively summed during each hour of the month and monthly totals used to determine compliance with the 12-month rolling annual emission limits of the MAERT.
 - H. During periods in which a CEMS is unable to produce a valid average concentration, hourly emissions will be calculated from monitoring of operational parameters including the turbine or boiler firing rates, air temperature, and fuel flow.
9. The holder of this permit shall monitor sulfur content of the fuel fired in the gas turbines in accordance with NSPS Subpart GG. The custom fuel monitoring schedule established August 8, 1986 and later amended on August 29, 1996, and approved by the EPA pursuant to 40 CFR § 60.334(b) is recognized as an enforceable condition of this permit. The holder of this permit must continue to demonstrate that the conditions of the custom schedule will assure continuous compliance with applicable requirements of Subpart GG.

Recordkeeping Requirements

10. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction.
11. The holder of this permit shall physically identify and permanently mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:
 - A. The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.
 - B. The EPNs as listed on the MAERT.
12. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
 - A. Average hourly NO_x and O₂ concentrations of EPNs STK-101 through STK-601 and EPN STK-801, and CO concentrations of EPN STK-601 which are monitored pursuant to Special Condition No. 8.
 - B. A raw data file of CEMS data including calibration checks and adjustments and maintenance performed on these systems or devices.
 - C. Hourly records of the fuel usage of each CT and the Auxiliary Boiler, including the hours and amount by weight of the alternate ethane or propane fuel fired in the CTs and duct burners. The Auxiliary Boiler fuel consumption records using the fuel higher heating value shall be used to demonstrate compliance with the usage limits of Special Condition No. 4.C.
 - D. Written records of the hours of operation of the CTs and duct burners covered by this permit.
 - E. Calculations of predicted hourly NO_x emissions from the CTs, duct burners, and the Auxiliary Boiler when the CEMS are inoperative, as required by Special Condition No. 8.H.
 - F. Records of rolling 12-month annual emissions to demonstrate compliance with the annual emission limits in the MAERT. For the CTs, duct burners,

and Auxiliary Boiler, these records shall be made using CEMS data and calculations as described in Special Condition No. 8.H. for NO_x. If CEMS data is not available for the other pollutants, then the following order shall be used based on the availability of data: stack testing data, vendor guarantees, AP-42 emission factors, or other approved emission factors.

- G. The results of all stack tests conducted pursuant to Special Condition No. 7.
- H. Fuel sulfur content records required to demonstrate compliance with Special Condition No. 9.
- I. Written records of any modifications or maintenance performed upon the CTs, duct burners, and the Auxiliary Boiler.
- J. Records to demonstrate compliance with Special Condition Nos. 17 through 20.

Reporting

- 13. The holder of this permit shall submit to the TCEQ Houston Regional Office, the Harris County Pollution Control Department, and the Air Enforcement Branch of the EPA in Dallas semi-annual reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to Special Condition No. 8. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain the hours of operation of the facility and a report summary of the periods of noncomplying emissions and CEMS downtimes by cause.
- 14. The holder of this permit shall report to the TCEQ Houston Regional Office and Harris County Pollution Control Department any periods of excess emissions from the Auxiliary Boiler, defined as any one-hour period, except during start-up and shutdown as specified in Special Condition No. 18, during which the average hourly NO_x emissions as measured by the CEMS exceed the concentration limit of Special Condition No. 5 or the applicable lb/hr limit of the MAERT, or any one-hour or annual period when the fuel consumption exceeds the limits of Special Condition No. 4.C.

Maintenance, Startup, and Shutdown Requirements

15. This permit authorizes the emissions from the planned MSS activities listed in Attachment A, Attachment B, and the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned maintenance activities that are non-ILE planned maintenance activities that this permit authorizes to be performed.
16. The holder of this permit shall minimize emissions during planned MSS activities by operating the facility in accordance with good air pollution control practices, safe operating practices, and protection of the facility.
17. Emissions during planned startup and shutdown activities for the CTs will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows:
 - A. A planned startup for each turbine is limited to no more than two hours (120 minutes). A planned startup for each turbine is defined as the period that begins when natural gas is introduced into the turbine and ends when the combustion system transfers into steady-state premix control.
 - B. A planned shutdown for each turbine is limited to no more than one hour (60 minutes). A planned shutdown for each turbine is defined as the period that begins when the combustion system transfers out of steady-state premix control and ends when natural gas is shut off to the turbine.
18. Emissions during planned startup and shutdown activities for the Auxiliary Boiler will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows.
 - A. A planned startup is defined as the period that begins when natural gas is introduced into the boiler and ends when the steam load is greater than or equal to 20 percent of the boiler design capacity. A planned startup for the boiler is limited to no more than one hour (60 minutes).
 - B. A planned shutdown for the boiler is defined as the period that begins when the steam load drops below 20 percent of the boiler design capacity and ends when natural gas is shut off to the boiler. A planned shutdown for the boiler is limited to no more than one hour (60 minutes).

Special Conditions

Permit Numbers 9241A and PSDTX493M4

Page 9

19. The following planned startup and maintenance activities specified below shall be limited as follows:
 - A. Planned combustion tuning for each CT shall not exceed 12 hours per event;
 - B. Planned combustion tuning for each duct burner shall not exceed 12 hours per event;
 - C. Planned combustion tuning for the Auxiliary Boiler shall not exceed 8 hours per event; and
 - D. Startup activities for the CTs as defined in Special Condition No. 17.A. shall be limited to no more two (2) turbines at any one time.
20. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit may be demonstrated as follows.
 - A. The permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
 - B. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 21.A., the permit holder shall compare the pollutant's hourly emissions during planned maintenance activities as measured by the CEMS to the applicable hourly planned MSS emissions limit in the MAERT.
 - C. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 21.A., the permit holder shall do the following for each calendar month.
 - (1) Determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 21.B.
 - (2) Once monthly emissions have been determined in accordance with Special Condition No. 20.C.(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall add the rolling 12-

month MSS emissions for the pollutant to the 12-month emissions (same 12 month period) that occurred and were emitted through the same stack during other operations. This total annual emission rate for the stack shall be compared to the applicable annual emission limit specified in the MAERT.

- D. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions do not occur through a stack (EPN MSS-FUG), the permit holder shall do the following for each calendar month.
 - (1) Determine the total emissions of the pollutant from such non-ILE planned maintenance activities in accordance with Special Condition No. 21.B.
 - (2) Once monthly emissions have been determined in accordance with Special Condition No. 20.D.(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the sum of the rolling 12-month emissions for the pollutant for all non-ILE planned maintenance activities to the annual emissions limit for the pollutant in the MAERT.
21. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 20 as follows.
- A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
 - B. For each pollutant not described in Special Condition No. 21.A., the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1 through 3 below, provided that the permit holder maintains appropriate records supporting such determination.

- (1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.
 - (2) Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
 - (3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
22. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities did not become effective until June 1, 2012.

De Minimis Facilities and Additional Authorizations at the Site

23. The following facilities at the site are de minimis facilities per 30 TAC § 116.119.
- A. Application of lubricants (including greases and oils) without aerosol propellants for maintaining equipment and other facilities.
 - B. Manual application of cleaning solutions, stripping solutions, and coatings using brushes, cloth pads, sponges, droppers, tube dispensing equipment, or spray bottles and pump-up sprayers without aerosol propellants.
 - C. Application of aqueous detergents, surfactants, and other cleaning solutions containing no more than one (1) percent of any organic compound by weight or containing no more than five (5) percent of any organic compound with a vapor pressure less than 0.002 pounds per square inch absolute.
 - D. Application of aerosol-propelled organic liquids using hand-held devices for maintaining equipment and other facilities where the usage is no more than four (4) aerosol cans or 64 ounces per day on a 12-month rolling average basis.
 - E. Application of argon, ethane, helium, hydrogen, methane, neon, nitrogen, and propane for testing, purging, and leak checking of equipment.

- F. Blast cleaning equipment using only water as the cleaning media.
 - G. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analyses (excluding pilot plants).
 - H. Air conditioning and ventilation systems maintenance and repair.
 - I. Any other de minimis activity or facility listed under 30 TAC § 116.119.
24. The following facilities are authorized either by PBR under 30 TAC Chapter 106 or by standard permit under 30 TAC Chapter 116, Subchapter F.

Facility	Authorization
Combustion Units for Comfort Heating	§ 106.102
Bench Scale Laboratory Equipment	§ 106.122
Soldering, Brazing, and Welding Equipment	§ 106.227
Surface Coating Facilities used for Maintenance	§ 106.263
Hand-held and Manually Operated Machines	§ 106.265
Degreasing Units	§ 106.454
Storage Tanks	§ 106.472
Storage Tanks	§ 106.473
Portable Engines	§ 106.511
Water and Waste Water Treatment Equipment	§ 106.532
Low-NO _x Burners for Gas Turbines (EPNs STK-101 through STK-501)	Permit No. 76375
Low-NO _x Burners for Duct Burners (EPNs STK-101 and STK-201)	Permit No. 79738

Date: April 8, 2013

Attachment A

Permit Nos. 9241A and PSDTX493M4 Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activity	Emissions				
	VOC	NO _x	CO	PM	SO ₂
Boiler general maintenance ¹				X	
Turbine general maintenance ²				X	
CEMS calibration ³		X			
Small equipment and fugitive components in VOC service – repair and replacement ⁴	X				

Notes:

¹Includes the following:

- (i) inspecting and replacing, as necessary, fire-tubes;
- (ii) overhauling fittings;
- (iii) cleaning the combustion chamber;
- (iv) inspecting piping; and
- (v) any other general boiler maintenance that does not exceed the worst-case emissions as represented in the application.

²Includes the following:

- (i) inspecting
 - (A) all flange-to-flange components of the turbine, including the combustion chamber;
 - (B) hot gas paths;
 - (C) piping; and
- (ii) any other general turbine maintenance that does not exceed the worst-case emissions as represented in the application.

³Includes daily CEMS calibration and periodic cylinder gas audits and/or linearity checks.

⁴Includes, but is not limited to:

- (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in natural gas, fuel oil, diesel oil, lube oil, and gasoline service; and
- (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service.

Date: April 8, 2013

Attachment B

Permit Nos. 9241A and PSDTX493M4

Non-ILE Planned Maintenance Activities

Planned Maintenance Activity	EPN	Emissions				
		VOC	NO _x	CO	PM	SO ₂
Gaseous fuel venting ¹	MSS-FUG	X				
Combustion tuning ²	STK-101, STK-201, STK-301, STK-401, STK-501, STK-601, STK-801	X	X	X	X	X

Notes:

¹Includes, but is not limited to: fuel gas separator venting.

²Includes, but is not limited to:

- (i) leak and operability checks (e.g., turbine over-speed tests, troubleshooting);
- (ii) balancing; and
- (iii) tuning activities that occur during seasonal tuning or after a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.

Date: April 8, 2013

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 9241A and PSDTX493M4

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
STK-101	GE Turbine and 140 MMBtu/hr Duct Burner Stack (MSS)(5)	NO _x	159.3	---
		CO	180	---
STK-201	GE Turbine and 140 MMBtu/hr Duct Burner Stack (MSS)(5)	NO _x	159.3	---
		CO	180	---
STK-301	GE Turbine Stack (MSS)(5)	NO _x	159.3	---
		CO	180	---
STK-401	GE Turbine Stack (MSS)(5)	NO _x	159.3	---
		CO	180	---
STK-501	GE Turbine Stack (MSS)(5)	NO _x	159.3	---
		CO	180	---
STK-601	GE F7EA Turbine Stack	NO _x	58	227.8
		NO _x (5)	116	---
		CO	59	227.8
		CO (5)	180	---
		PM	7.0	30.7
		VOC	6.1	18.7
		SO ₂	1.7	6.5

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
STK-801	Auxiliary Steam Boiler	NO _x	17.6	50
		NO _x (MSS)(5)	35.2	---
		CO	25.7	73
		PM	1.76	1.8
		VOC	1.41	4.0
		SO ₂	0.63	5.0
MSS-FUG	Maintenance, Startup, and Shutdown – Site-wide	VOC	1.62	<0.01
		NO _x	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
Standard Permit (SP) sources incorporated by reference. Sources remain authorized by the SP(s) as listed below:				
Standard Permit Number 79738				
STK-101	GE Turbine and 140 MMBtu/hr Duct Burner Stack	NO _x	24.63	107.9
		CO	120.9	529.7
		PM ₁₀	14.7	64.5
		VOC	2.2	7.9
		SO ₂	2.0	8.7
STK-201	GE Turbine and 140 MMBtu/hr Duct Burner Stack	NO _x	24.63	107.9
		CO	120.9	529.7
		PM ₁₀	14.7	64.5
		VOC	2.2	7.9
		SO ₂	2.0	8.7

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Standard Permit Number 76375				
STK-301	GE Turbine Stack	NO _x	159.3	77.2
		CO	115	504
		PM	14	61.3
		VOC	2.0	7.0
		SO ₂	1.8	7.7
STK-401	GE Turbine Stack	NO _x	159.3	77.2
		CO	115	504
		PM	14	61.3
		VOC	2.0	7.0
		SO ₂	1.8	7.7
STK-501	GE Turbine Stack	NO _x	159.3	77.2
		CO	115	504
		PM	14	61.3
		VOC	2.0	7.0
		SO ₂	1.8	7.7

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) NO_x - total oxides of nitrogen
CO - carbon monoxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
SO₂ - sulfur dioxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual limits include normal and maintenance, start-up, and shutdown (MSS) emissions.
- (5) Emission limits applicable during MSS activities. Hourly emissions shown are the only emissions that are higher than emissions during normal operations. During CT MSS, normal operations emissions limits apply to all pollutants not shown with separate MSS limits.

Date: May 10, 2013